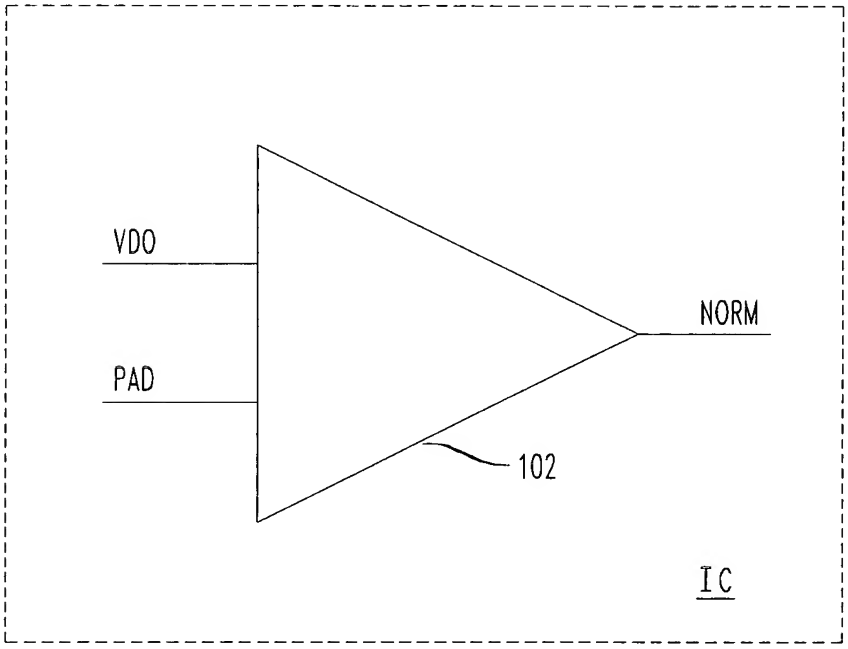
OIPE IAP45 NOV 08 2005 PATENT & TRADEMARK OFFICE

FIG. 1



COMPACTOR TO GENERATE NORM SIGNAL

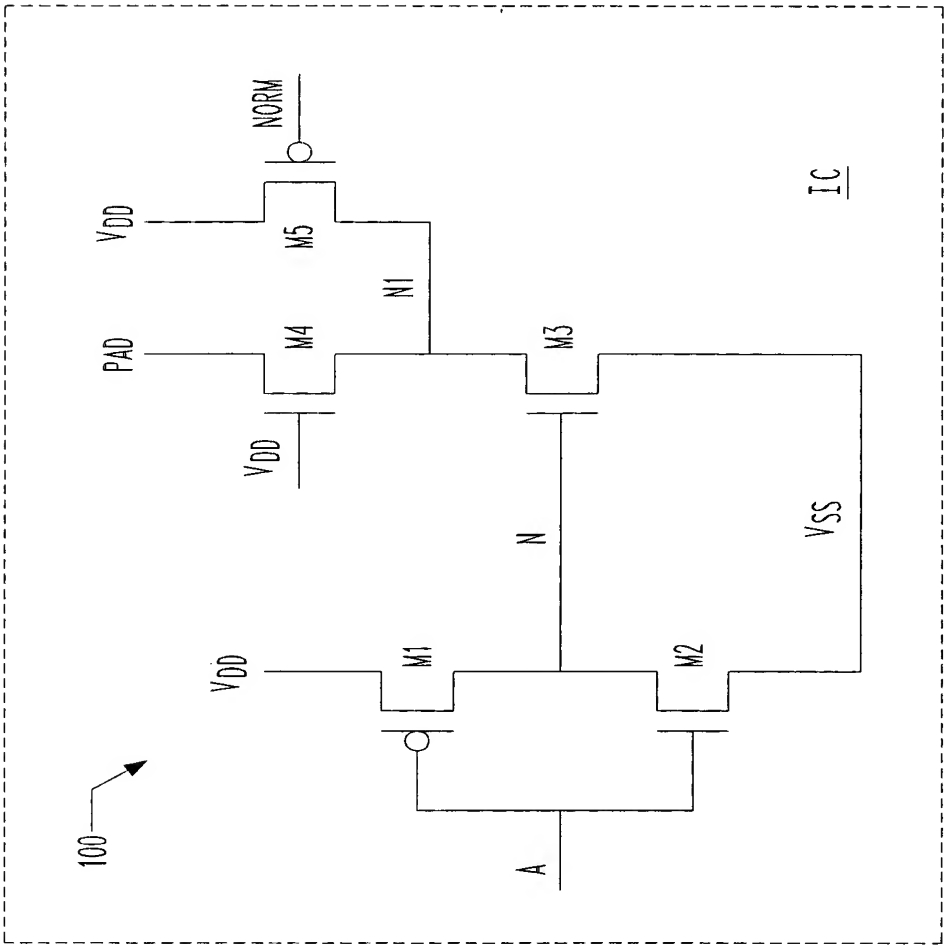
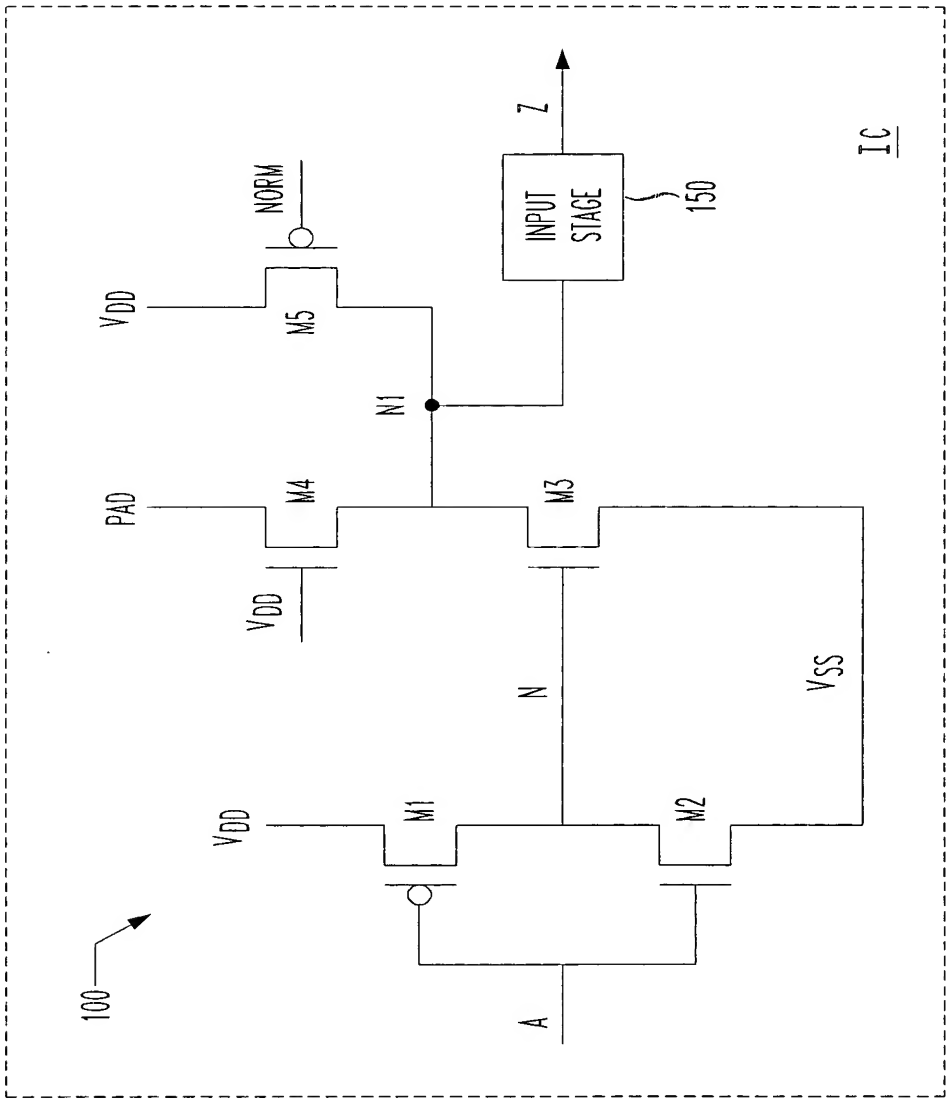

NORM
VDD
M5
N1
PAD
M4
M3
VDD
IC
N
VSS
VDD
M1
M2
100
A
IMPROVED 5V TOLERANT OPEN DRAIN OUTPUT BUFFER

FIG. 2



IMPROVED 5V TOLERANT OPEN DRAIN BI-DIRECTIONAL BUFFER

FIG. 3

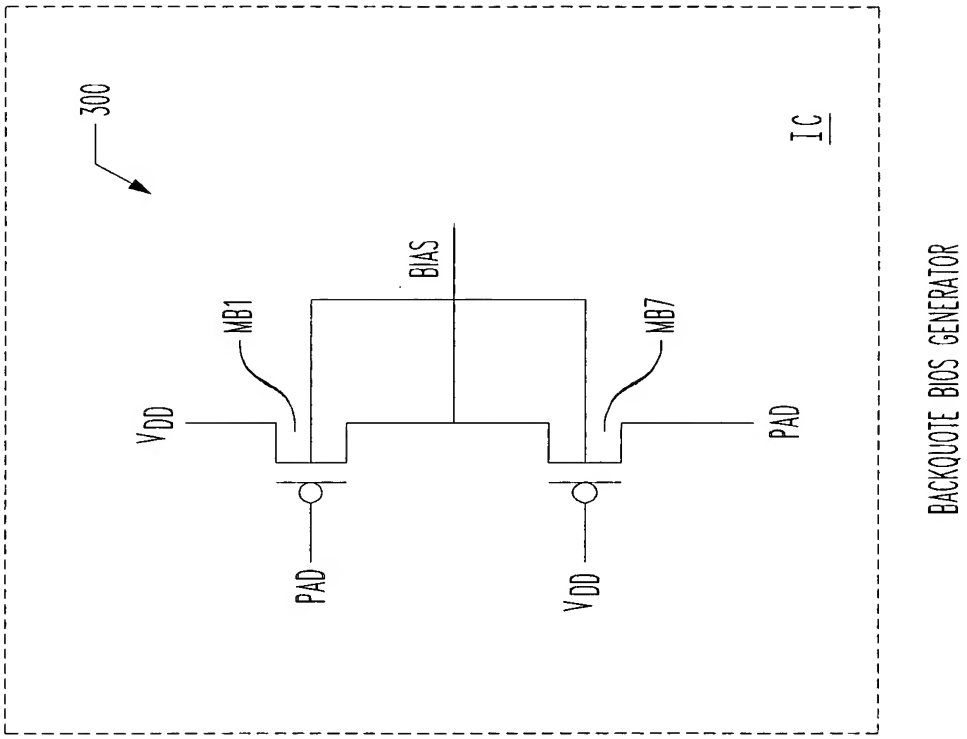
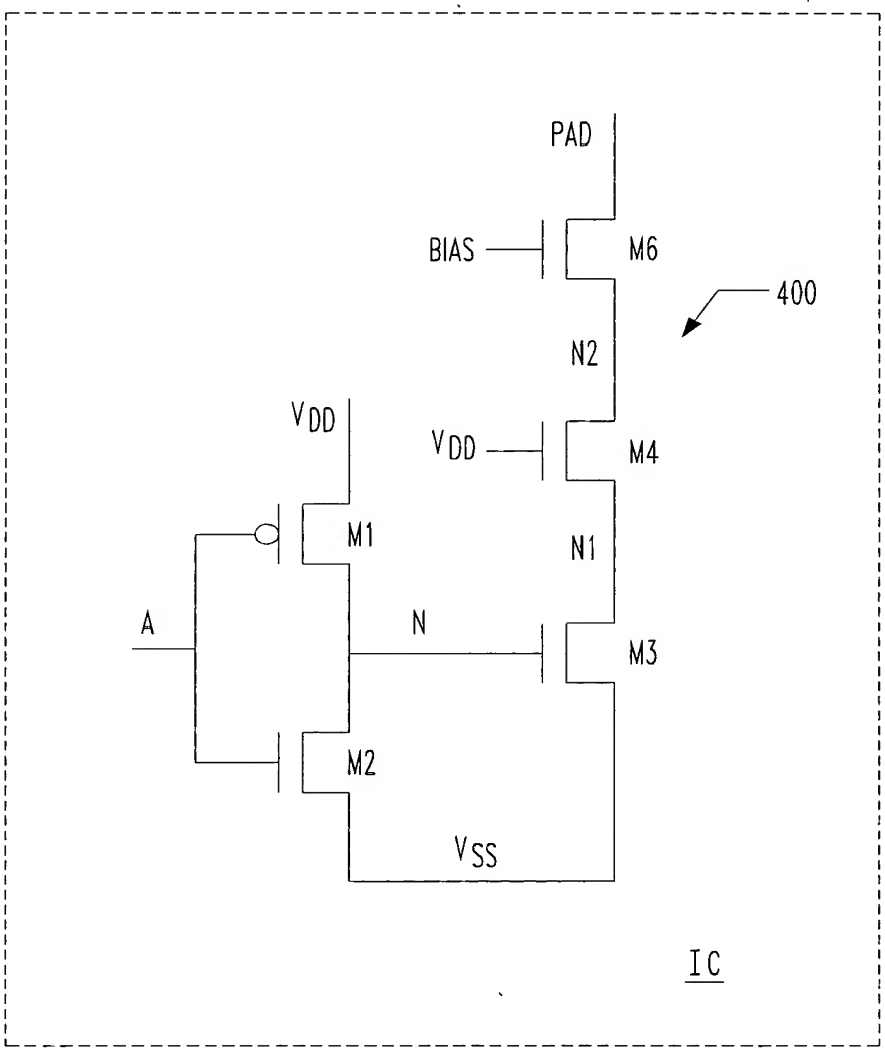


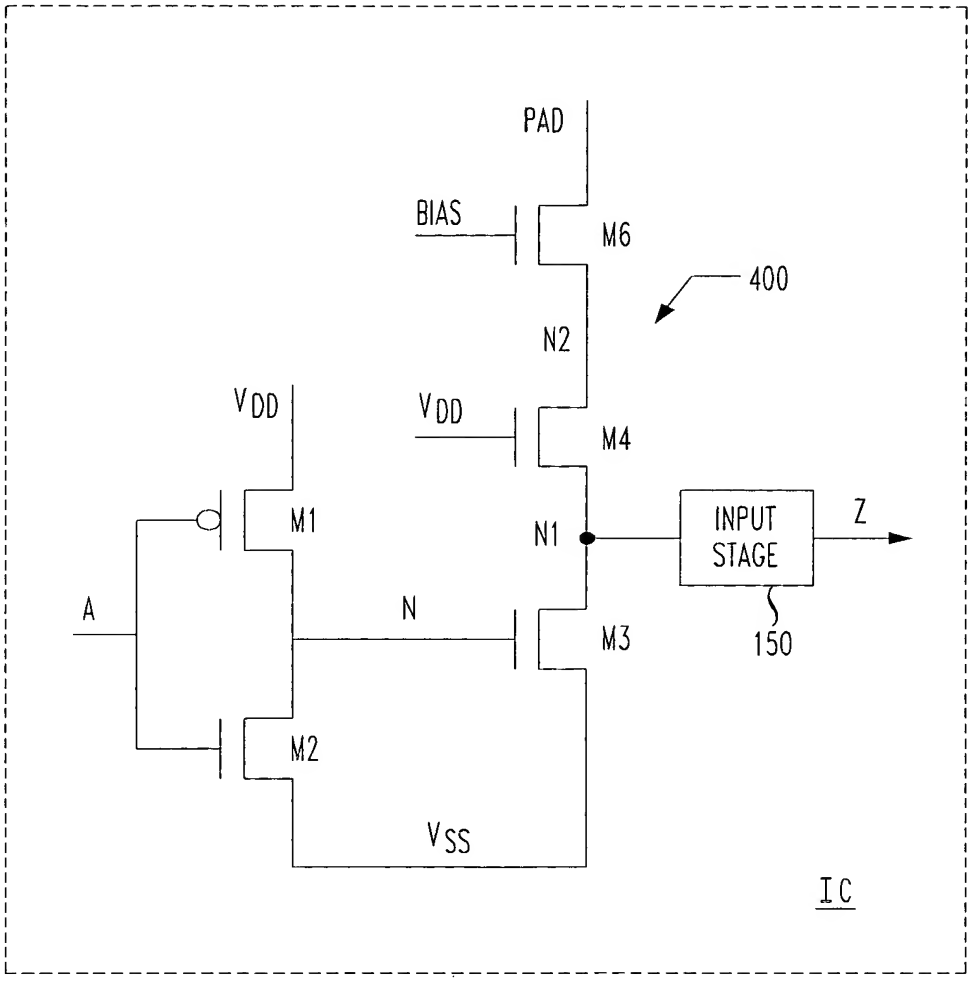
FIG. 4

FIG. 5



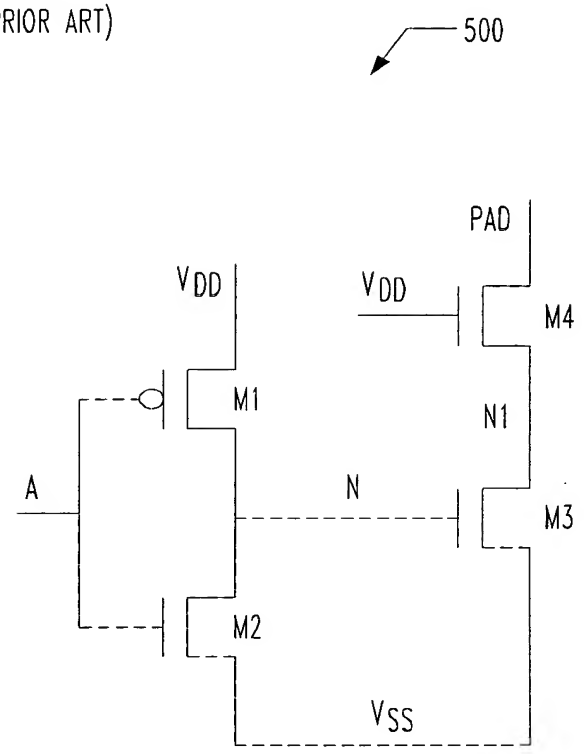
IMPROVED 5V TOLERANT OPEN DRAIN OUTPUT BUFFER

FIG. 6



IMPROVED 5V TOLERANT OPEN DRAIN BI-DIRECTIONAL BUFFER

FIG. 7
(PRIOR ART)



5V TOLERANT OPEN DRAIN OUTPUT BUFFER